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EXAMINER	
MEHTA, ASHWIN D	

ART UNIT	PAPER NUMBER
1638	10

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Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 09/971,020	Applicant(s) SANO ET AL.
	Examiner Ashwin Mehta	Art Unit 1638

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If the period for reply specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *16 July 2002*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *16-34* is/are pending in the application.

4a) Of the above claim(s) *16,17 and 28-31* is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *18-27,32 and 33* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☒ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11)☐ The proposed drawing correction filed on _____ is: a)☐ approved b)☐ disapproved by the Examiner.

If approved, corrected drawings are required in reply to this Office action.

12)☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☒ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

a) ☐ The translation of the foreign language provisional application has been received.

15)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☒ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 5.
4) ☐ Interview Summary (PTO-413) Paper No(s). _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other:

DETAILED ACTION

Election/Restrictions

1. Applicant's election without traverse of Group II, claims 18-27, 32, and 33 in Paper No. 9 is acknowledged. Applicants are reminded to cancel non-elected claims 16, 17, 28-31, and 34.

Priority

2. Acknowledgment is made of applicant's claim for foreign priority based on an application filed in Japan on 06 October 2000. It is noted, however, that applicant has not filed a certified copy of the Japanese application as required by 35 U.S.C. 119(b).

Specification

3. Applicant is reminded of the proper language and format for an abstract of the disclosure. The abstract should be in narrative form and generally limited to a single paragraph on a separate sheet within the range of 50 to 150 words. It is important that the abstract not exceed 150 words in length since the space provided for the abstract on the computer tape used by the printer is limited. The form and legal phraseology often used in patent claims, such as "means" and "said," should be avoided. The abstract should describe the disclosure sufficiently to assist readers in deciding whether there is a need for consulting the full patent text for details. The language should be clear and concise and should not repeat information given in the title. It should avoid using phrases which can be implied, such as, "The disclosure concerns," "The disclosure defined by this invention," "The disclosure describes," etc.

4. Figures 2 and 6 have multiple parts. However, the brief descriptions for these figures on page 3 do not refer to the separate parts. For Figure 2, it is suggested that the brief description indicate which part of the figure represents the different cDNAs, MTL1, MTL2, MTL3, and MXMT1. For Figure 6, it is suggested that the recitation --(A-E)-- be inserted into page 3, line 17 after "Fig 6".

5. The specification fails to comply with the sequence rules of 37 CFR 1.821-1.825. The brief descriptions of Figures 2 and 3 should identify the sequences in those figures with their sequence identifiers. Page 7, lines 18, 19, and 23 also contain sequences that need to be identified by their sequence identifiers.

Claim Objections

6. Claims 18-27, 32, and 33 are objected to for the following reasons.

Claims 18, 19, 22-27, 32, and 33 are objected to for being dependent on a non-elected claim.

In claim 20: parts (c)-(e) of the claim should be changed to (a)-(c).

In claim 21: the second recitation of "of" in line 1, appearing after "90%", should be deleted.

Claim Rejections - 35 USC § 101

35 U.S.C. 101 reads as follows:

> Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

7. Claims 18-21 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

The claims are broadly drawn towards any gene encoding a polypeptide defined by the amino acid sequence of SEQ ID NO: 1, or any amino acid sequence in which any part of the sequence of SEQ ID NO: 1 has been substituted, deleted, or added to, and having the activity to biosynthesize theobromine using 7-methlyxanthine as a substrate; or any gene encoding any polypeptide exhibiting at least 90% homology with SEQ ID NO: 1; or any gene consisting of a base sequence defined by SEQ ID NO: 2, or a sequence in which any part of SEQ ID NO: 2 has been substituted, deleted, or added to, and encoding a polypeptide having the activity to biosynthesize theobromine using 7-methlyxanthine as a substrate; or any gene consisting of any base sequence exhibiting at least 90% homology with SEQ ID NO: 2.

Claims 18-21 read on genes per se which are found in nature and thus, are unpatentable to applicant. The genes, as claimed, have the same characteristics as those found naturally in the genome or as cellular precursors thereof and therefore do not constitute patentable subject matter. See American Wood v. Fiber Disintegrating Co., 90 U.S. 566 (1974), American Fruit Growers v. Brodgex Co., 283 U.S. 2 (1931), Funk Brothers Seed Co. v. Kalo Inoculant Co., 33 U.S. 127 (1948), Diamond v. Chakrabarty, 206 USPQ 193 (1980). It is suggested that Applicants use the language "isolated" or "purified" in connection with the gene to identify a product that is not found in nature.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

8. Claims 20-27, 32, and 33 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claims 20 and 21: the recitation "a Sequence List" in line 3 of the claims render them and those dependent thereon indefinite. The article "a" suggests that there is more than one sequence listing. It is suggested that the recitation be replaced with --the sequence listing--.

Further in claim 20: the recitation "a base sequence that hybridizes with said base sequence (c) under stringent condition" in lines 8-9 render the claim indefinite. It is not clear what the stringent conditions are. The specification at page 4, lines 22-26 indicates that a gene that hybridizes under stringent conditions means a gene in which 10 or less bases of the sequence is deleted, substituted, or added to SEQ ID NO: 2. However, this does not define the "stringent condition" itself. Further, hybridization conditions are not described in the art by the number of bases that are added, deleted, or substituted relative to the template sequence, but by the actual conditions under which the hybridization takes place.

Further in claim 21: the term "homology" in line 2 renders the claim indefinite. It is not exactly clear what is meant by this term. It is suggested that the term be replaced with --identity--.

The following is a quotation of the first paragraph of 35 U.S.C. 112:

> The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

9. Claims 18-21, 32, and 33 are rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

The claims are broadly drawn towards any gene encoding a polypeptide defined by the amino acid sequence of SEQ ID NO: 1, or any amino acid sequence in which any part of the sequence of SEQ ID NO: 1 has been substituted, deleted, or added to, and having the activity to biosynthesize theobromine using 7-methlyxanthine as a substrate; or any gene encoding any polypeptide exhibiting at least 90% homology with SEQ ID NO: 1; or any gene consisting of a base sequence defined by SEQ ID NO: 2, or a sequence in which any part of SEQ ID NO: 2 has been substituted, deleted, or added to, and encoding a polypeptide having the activity to biosynthesize theobromine using 7-methlyxanthine as a substrate; or any gene consisting of any base sequence exhibiting at least 90% homology with SEQ ID NO: 2; any transformed plant wherein expression of said gene is decreased to inhibit biosynthesis of theobromine; or said transformed plant wherein antisense gene methods are utilized to inhibit biosynthesis of theobromine; a seed obtained from said plant; a method for the production of a transformed plant in which biosynthesis of theobromine is inhibited by decreasing expression of said gene; or wherein said method wherein antisense gene method is utilized.

The specification indicates that a cDNA library was made from RNA extracted from *Coffee arabica* leaves. The library was probed with a PCR fragment, the sequence of which is not described, and four clones designated 1, 6, 35, and 45 were isolated. The sequence of clone 45 is shown in SEQ ID NO: 2, which encodes the amino acid sequence of SEQ ID NO: 1. Clone 1 is shown in SEQ ID NO: 4, which encodes SEQ ID NO: 3. clone 6 is shown in SEQ ID NO: 6, which encodes SEQ ID NO: 5. Clone 35 is shown in SEQ ID NO: 8, which encodes SEQ ID NO: 7. Clone 45 was given the designation "MXMT1," clone 1 is "MTL1," clone 6 is "MTL2," and clone 35 is "MTL3" (page 7, line 15 to page 8, line 30). The specification indicates that the encoded amino acid sequences of SEQ ID NOs: 3, 5, and 7 have higher than 80% homology compared with SEQ ID NO: 1, but do not exhibit activity as theobromine synthase (page 5, lines 14-17). Each of the clones was expressed in *Escherichia coli* as GST fusion proteins, and the isolated proteins were tested for N-methyltransferase activity. The MXMT1 fusion protein showed activity, using 7-methlyxanthine as substrate (page 9, line 4 to page 11, line 8).

However, the specification does not describe any gene that encodes a product that has the same N-methyltransferase activity as SEQ ID NO: 1. The specification does not describe genes that differ from SEQ ID NO: 2 (other than due to genetic code degeneracy), or which encode polypeptides that have substitutions, deletions, or additions relative to SEQ ID NO: 1, and which have the same N-methlytransferase activity as SEQ ID NO: 1. The specification admits that SEQ ID NOs: 3, 5, and 7, which share more than 80% homology with SEQ ID NO: 1, do not share its function. The specification does not describe the changes that can be made to SEQ ID NOs: 1 or 2 without altering the enzymatic activity of SEQ ID NO: 1. Ogawa et al. (J. Biol. Chem., 2001, Vol. 276, pages 8213-8218) also teach the isolation of the cDNA clones of the

instant invention. Ogawa et al. teach that the MXMT1 protein has strict substrate specificity toward methylation only at the 3-N-position of the purine ring of 7-methlyxanthine (pages 8213 and 8215). Ogawa et al. also teach that products of clones 1, 6, and 35 have 80.8, 81.3, and 84.7 identity, respectively, with clone 45 product (page 8215). Ogawa et al. also teach that only a few amino acids of the MXMT1 protein may determine substrate specificity, and that further investigation is required to clarify this point (page 8217). Only a few amino acids may change the functional activity of instant SEQ ID NO: 1, and the specification does not describe those amino acid residues that can be changed in SEQ ID NO: 1 without affecting its functional activity. Also see Fiers vs. Sugarno, 25 USPQ 2d (CAFC 1993) at 1606, which states that "[a]n adequate written description of a DNA requires more than a mere statement that it is part of the invention and reference to a potential method for isolating it; what is required is a description of the DNA itself". Given the breadth of the claims encompassing any gene encoding an amino acid sequence in which any part of the sequence of SEQ ID NO: 1 has been substituted, deleted, or added to, and having the activity to biosynthesize theobromine using 7-methlyxanthine as a substrate; or any gene encoding any polypeptide exhibiting at least 90% homology with SEQ ID NO: 1, or any gene having at least 90% homology with SEQ ID NO: 2, and the lack of written description as discussed above, the specification fails to provide an adequate written description of the multitude of nucleic acid molecules encompassed by the claims.

10. Claims 18-27, 32, and 33 are rejected under 35 U.S.C. 112, first paragraph, because the specification, while being enabling for SEQ ID NO: 1, does not reasonably provide enablement for genes that encode amino acid sequences that differ from SEQ ID NO: 1 and have the activity

to biosynthesize theobromine from 7-methlyxanthine and all methods to produce transformed plants in which expression of the claimed gene is decreased and biosynthesis of theobromine is inhibited. The specification does not enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention commensurate in scope with these claims.

The claims are broadly drawn towards any gene encoding a polypeptide defined by the amino acid sequence of SEQ ID NO: 1, or any amino acid sequence in which any part of the sequence of SEQ ID NO: 1 has been substituted, deleted, or added to, and having the activity to biosynthesize theobromine using 7-methlyxanthine as a substrate; or any gene encoding any polypeptide exhibiting at least 90% homology with SEQ ID NO: 1; or any gene consisting of a base sequence defined by SEQ ID NO: 2, or a sequence in which any part of SEQ ID NO: 2 has been substituted, deleted, or added to, and encoding a polypeptide having the activity to biosynthesize theobromine using 7-methlyxanthine as a substrate; or any gene consisting of any base sequence exhibiting at least 90% homology with SEQ ID NO: 2; any transformed plant wherein expression of said gene is decreased to inhibit biosynthesis of theobromine; or said transformed plant wherein antisense gene methods are utilized to inhibit biosynthesis of theobromine; a seed obtained from said plant; a method for the production of a transformed plant in which biosynthesis of theobromine is inhibited by decreasing expression of said gene; or wherein said method wherein antisense gene method is utilized.

As discussed above, the specification teaches the isolation of a cDNA clone (SEQ ID NO: 2) from *Coffea arabica* that encodes a protein (SEQ ID NO: 1) that catalyzes the methylation of 7-methlyxanthine to convert it to theobromine. In the main biosynthetic pathway

for caffeine, a final N-methylation reaction converts theobromine into caffeine (page 1, line 22 to page 2 line 9; Figure 1). Also as discussed above, the specification teaches that three other cDNA clones were isolated along with SEQ ID NO: 2, the products of which share over 80% identity with SEQ ID NO: 1, but do not share its functional activity.

However, the specification does not teach genes that encode products that differ from SEQ ID NO: 1 and which have its functional activity. The specification does not teach how SEQ ID NO: 1 can be changed without affecting its functional activity. The specification does not provide any information regarding functional domains of SEQ ID NO: 1, such as binding sites, catalytic domains, etc., which provide information about amino acid sequences that are important for enzymatic activity. In the absence of further guidance, one skilled in the art would be left to make random substitutions, deletions, and/or additions to SEQ ID NO: 2 and test them for retention of enzymatic activity, which amounts to an undue amount of experimentation. Also, as discussed above, Ogawa et al. teach that only a few amino acids may determine substrate specificity. The specification does not teach what other amino acid changes can be endured by SEQ ID NO: 1 without affecting its function.

Further, the claimed method encompasses any manner of decreasing the expression of the claimed genes. The specification mentions that antisense, co-suppression, or RNAi techniques can be used to inhibit gene expression (page 5, line 20 to page 6, line 22). However, no other means of decreasing expression of the claimed genes is discussed or even mentioned, although other methods, such as ribozyme technology, are broadly encompassed by the claims. See Genentech, Inc. V. Novo Nordisk, A/S, 42 USPQ2d 1001, 1005 (Fed. Cir. 1997), which teaches that "the specification, not the knowledge of one skilled in the art" must supply the enabling

aspects of the invention. It is suggested that claims 22 and 32 be amended to indicate that expression of the claimed genes is decreased using the techniques taught in specification. Given the breadth of the claims encompassing any gene encoding an amino acid sequence that differs from SEQ ID NO: 2, and transgenic plants and methods in which expression of the claimed genes is decreased by any means, unpredictability of the art and lack of guidance of the specification as discussed above, undue experimentation would be required by one skilled in the art to make and use the claimed invention.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

11. Claims 18-21 are rejected under 35 U.S.C. 102(a) as being clearly anticipated by Ogawa et al. (J. Biol. Chem., 16 March 2001, Vol. 276, pages 8213-8218).

The claims are broadly drawn towards any gene encoding a polypeptide defined by the amino acid sequence of SEQ ID NO: 1, or any amino acid sequence in which any part of the sequence of SEQ ID NO: 1 has been substituted, deleted, or added to, and having the activity to biosynthesize theobromine using 7-methlyxanthine as a substrate; or any gene encoding any polypeptide exhibiting at least 90% homology with SEQ ID NO: 1; or any gene consisting of a base sequence defined by SEQ ID NO: 2, or a sequence in which any part of SEQ ID NO: 2 has

been substituted, deleted, or added to, and encoding a polypeptide having the activity to biosynthesize theobromine using 7-methlyxanthine as a substrate; or any gene consisting of any base sequence exhibiting at least 90% homology with SEQ ID NO: 2.

Ogawa et al. teach the isolation of a cDNA sequence from *C. arabica* plants, which they term CaMXMT, and the encoded amino acid sequence. The cDNA and encoded protein are the same as instant SEQ ID NO: 2 and SEQ ID NO: 1, respectively (pages 8214-8215). SEQ ID NO: 2 is also taught in GenBank Accession No. AB048794.

As the foreign priority papers have not yet been received, Ogawa et al. is considered prior art. Further, to rely upon the foreign priority papers to overcome this rejection, Applicant is also required to submit a translation of said papers, in accordance with 37 CFR 1.55. See MPEP § 201.15.

12. Claims 18, 20, 22, 23, 25, 32, and 33 are rejected under 35 U.S.C. 102(b) as being anticipated by Mizuno et al. (EP 1055727 A2).

The claims are broadly drawn towards any gene encoding a polypeptide defined by the amino acid sequence of SEQ ID NO: 1, or any amino acid sequence in which any part of the sequence of SEQ ID NO: 1 has been substituted, deleted, or added to, and having the activity to biosynthesize theobromine using 7-methlyxanthine as a substrate; or any gene consisting of a base sequence defined by SEQ ID NO: 2, or a sequence in which any part of SEQ ID NO: 2 has been substituted, deleted, or added to, and encoding a polypeptide having the activity to biosynthesize theobromine using 7-methlyxanthine as a substrate; any transformed plant wherein expression of said gene is decreased to inhibit biosynthesis of theobromine; or said transformed

plant wherein antisense gene methods are utilized to inhibit biosynthesis of theobromine; a method for the production of a transformed plant in which biosynthesis of theobromine is inhibited by decreasing expression of said gene; or wherein said method wherein antisense gene method is utilized.

Masako et al. teach an isolated nucleotide sequence (SEQ ID NO: 2) encoding an amino acid sequence that has the activities of three methyl transferases, one of which converts 7-methylxanthine to theobromine (page 2, lines 1-8; page 5, lines 13-17; page 12, lines 26-36). The nucleotide sequence of SEQ ID NO: 1 of Masako et al. can be considered to be a gene that encodes an amino acid sequence in which a part of the amino acid sequence of instant SEQ ID NO: 1 has been substituted, deleted, or to which an amino acid sequence has been added. SEQ ID NO: 1 of Masako et al. can be considered to be a gene consisting of a base sequence in which a part of instant SEQ ID NO: 2 is deleted, substituted, or to which another base sequence has been added. Masako et al. also teach the production of transgenic coffee plants expressing the antisense sequence of their SEQ ID NO: 2, to inhibit expression of the N-methyl transferase (page 4, lines 7-9; page 6, lines 20-35). The property of not producing theobromine therefore is inherent to the plant. Caffeine production was significantly reduced in the transgenic plant (page 12, line 40 to page 12, line 15).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person

having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

13. Claims 18-27, 32, and 33 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mizuno et al. (EP 1055727 A2) in combination with Hatanaka et al. (Plant Cell Rep., 1999, Vol. 19, pages 106-110) and Ogawa et al. (J. Biol. Chem., 16 March 2001, Vol. 276, pages 8213-8218).

Mizuno et al. teaches a nucleotide sequence that encodes polypeptide that converts 7-methylxanthine to theobromine, and a method for inhibiting the expression of theobromine in transgenic plants, comprising antisense expression of the nucleotide sequence, as discussed above.

Mizuno et al. do not explicitly teach transformation of the coffee species listed in claim 24 or seeds of transgenic plants.

Hatanaka et al. teach a method for genetically transforming *Coffea canephora* (pages 107-110).

Ogawa et al. is discussed above. Ogawa et al. also assert that recombinant DNA technology using CaMXMT may remove the need for using chemical treatments to make decaffeinated coffee by creating caffeineless coffee plants.

It would have been obvious and within the scope of one of ordinary skill in the art at the time the invention was made to modify the method of inhibiting theobromine production of Mizuno et al. by transforming the vector comprising the antisense sequence of the N-methyltransferase gene into other caffeine-producing plants, such as *Coffea canephora*, using the transformation method of Hatanaka et al. It would also have been obvious to substitute the N-methyltransferase gene of Mizuno et al. with the CaMXMT gene taught by Ogawa et al. One

would have been motivated to use the gene taught by Ogawa et al. given their assertion to use recombinant DNA technology and CaMXMT to produce caffeineless coffee plants. One would have been motivated to use the method with other species of coffee plants, as Mizuno et al. have demonstrated that the method works in coffee plants. One would obviously have been motivated to collect seed from the transgenic plants for the purpose of propagation.

14. Claims 18-27, 32, and 33 are rejected. Claims 16, 17, 28-31, and 34 are withdrawn from consideration.

Contact Information

Any inquiry concerning this earlier communications from the examiner should be directed to Ashwin Mehta, whose telephone number is 703-306-4540. The examiner can normally be reached on Mondays-Thursdays and alternate Fridays from 8:00 A.M to 5:30 P.M. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Amy Nelson, can be reached at 703-306-3218. The fax phone numbers for the organization where this application or proceeding is assigned are 703-305-3014 and 703-872-9306 for regular communications and 703-872-9307 for After Final communications. Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0196.

ASHWIN D. MEHTA, PH.D
PATENT EXAMINER

September 20, 2002